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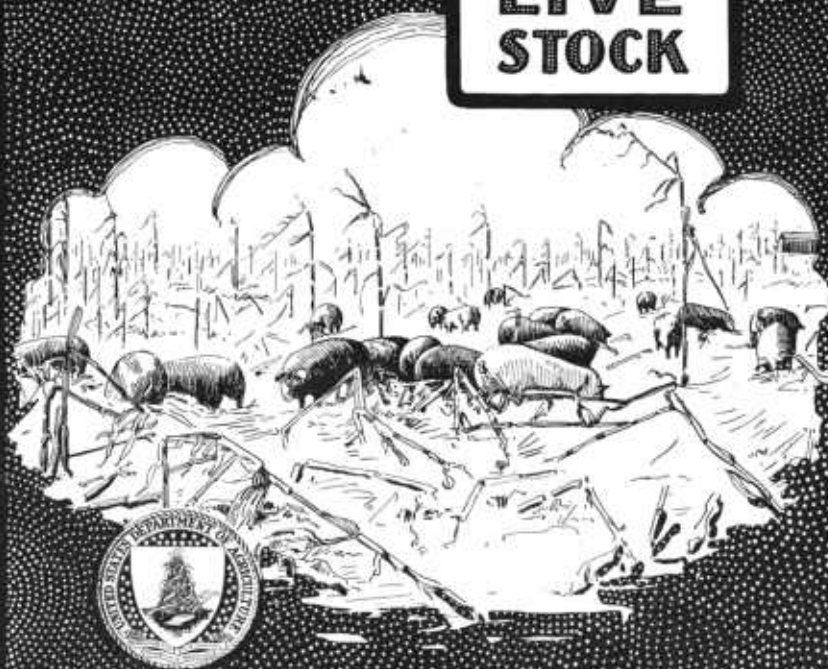
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FARMERS' BULLETIN 1008
UNITED STATES DEPARTMENT OF AGRICULTURE

**SAVING
FARM
LABOR**

by

**HARVESTING
CROPS
WITH
LIVE
STOCK**



FARM LABOR often may be saved by using live stock to harvest and market part of the crops. By pasturing forage crops, and feeding down grain crops, much labor can be saved.

Hay must be secured for winter feeding, and grain for home use and seed, but on many farms a considerable acreage may be turned directly into beef, pork and mutton.

Pasturing off the crops also helps to maintain the fertility of the soil without extra labor or expense.

The keeping of farm animals furnishes profitable work during the winter when other work is less pressing, and when they require most care. This distributes remunerative labor throughout the year more evenly than otherwise would be possible.

This bulletin points out, largely by pictures of actual farm practices, some of the advantages of keeping live stock and of using the hogs, sheep and beef cattle to help harvest and market farm crops.

OFFICE OF THE SECRETARY

Contribution from the Office of Farm Management

E. H. THOMSON, Acting Chief

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SAVING FARM LABOR BY HARVESTING CROPS WITH LIVE STOCK

J. A. DRAKE, Agriculturist

FARM ANIMALS AS HARVEST HANDS

LIVE STOCK, properly managed, will help the overworked farmer to harvest some of his crops profitably, thus saving man labor during the busy seasons. In return, the care of the young stock furnishes profitable employment for the farmer and his hired help, if he has any, during the winter and early spring, when work is slack. This not only saves much man labor during the busy season, but equalizes the labor throughout the different seasons.

When sufficient farm labor is not available to harvest all the crops, live stock offer a profitable method of taking care of the surplus hay and grain by pasturing them. The farm animals not only harvest them cheaply, but while doing so make profitable gains and help to maintain soil fertility. Instead of cutting the entire alfalfa, clover or other hay crop, pasturing some of it saves much labor.

The cash returns from the hay harvested by the live stock are usually fully equal to those received when the hay is harvested by hand labor.

Waste or poor rye, wheat, oats and barley may be hogged down to excellent advantage. Corn and mature soy beans are harvested successfully by hogs and sheep, and to some extent by cattle. It is usually customary to fence off part of a corn field by a movable fence, and after one strip is cleaned up, to inclose another. Plenty of water and a little salt are necessary for the greatest improvement of the live stock. Soy beans planted with the corn, and rape sown at the last cultivation, add to the feeding value of the corn.

PROSPECTIVE HARVEST HANDS

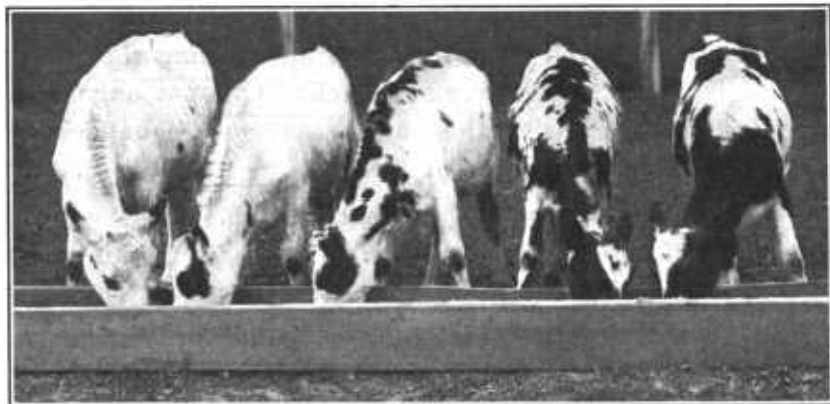
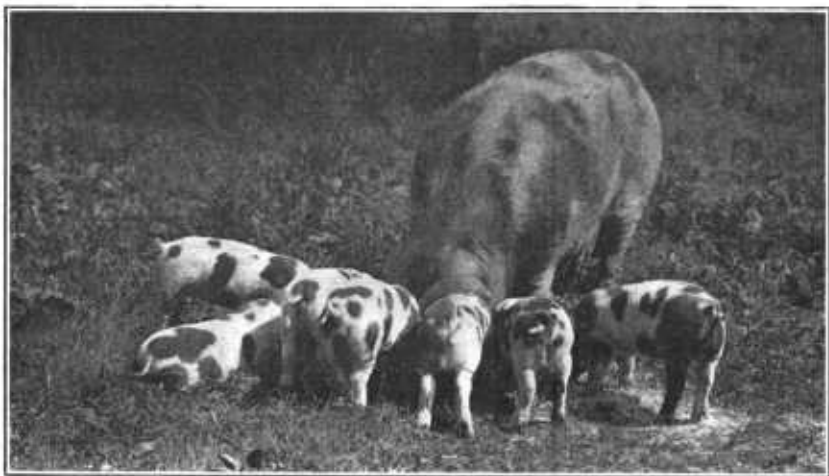


FIG. 1.—Young stock require considerable care and attention, but usually at a season when the farmer has little else to do. The farmer can well afford extra work with them in the winter, as these same animals will assist in harvesting his crops later in the season.

THE ALFALFA HAY CROP



FIG. 2.—The greater part of the alfalfa hay crop must be harvested at a very busy season. Some advantage may be gained by the use of improved methods of baying, but at best much heavy work must be done.



FIG. 3.—Much of the labor expended in harvesting alfalfa, as shown in figure 2, can be avoided by pasturing part of the crop with hogs. The hogs shown in figure 3 received three ears of corn each per day. With this light feeding of grain they consumed large quantities of alfalfa, and after the first cutting did the work of harvesting the entire crop.

MIXED HAY



FIG. 4.—Putting up hay requires a great amount of labor, even where the best equipment is used.



FIG. 5.—Grass crops can be utilized to advantage by pasturing with sheep. Much less labor is required than when the crop is cut for hay, as shown in figure 4.

CLOVER AND ALFALFA HAY



FIG. 6.—In commercial hay production, baling and hauling require much labor which is avoided when the crop is harvested by pasturing, as in figure 7.



FIG. 7.—Beef steers consume large amounts of clover or alfalfa pasture and harvest the hay crop rapidly, generally with a good profit. With this method the labor required is almost negligible. Dairy cows and young stock are also very effective in pasturing clover and alfalfa. Usually some care is required at first to prevent bloating.

HOGGING DOWN CORN



FIG. 8.—When corn is cut, husked and cribbed by hand, and later fed to live stock or sold on the market, much labor is required. Under present conditions it is difficult to get enough men to cut and husk large acreages of corn at a reasonable cost.



FIG. 9.—A most excellent way of harvesting a large part of the corn crop is to "hog it down." The hogs do the work with even less waste than if the corn is harvested by hand, as in figure 8. Furthermore, they make better gains than when fed. Thus there is a double advantage. The hogs shown above are a part of a herd that harvested an 80-acre field of heavy corn. The labor saved was a big item. These hogs had access at all times to tankage in self-feeders and made most excellent gains. Some farmers sow soy beans in the corn to take the place of tankage.

SHEEPING OFF CORN



FIG. 10.—Harvesting corn with a corn binder speeds up the process somewhat, but requires nearly as much labor as harvesting by hand and effects little or no saving in expense.



FIG. 11.—“Sheeping off” corn has become a rather common practice in some sections, affording another means of saving labor with the corn crop and returning the fertilizer value to the fields immediately. Usually soy beans or rape are sown in the corn at the last cultivation, which increases the forage. The sheep shown above have cleaned up the soy beans and are now beginning on the corn. They were left in until the entire crop was harvested, when they were fat and ready for market. It is usually a good plan afterwards to turn in hogs to clean up whatever waste may remain.

CATTLE ON CORN



FIG. 12.—Husking corn from the standing stalks requires less labor than where the corn is cut, shocked and husked; but huskers are difficult to get, and even this method requires much more labor than where the crop is husked by live stock, as in figure 13. At the same time practically the entire value of the stalks and leaves is lost.



FIG. 13.—The use of cattle for harvesting corn succeeds very well if hogs are later turned in to clean up what the cattle may have left on the ground. Cattle may be used thus almost as successfully as sheep or hogs. Cattle are also sometimes used to consume the standing fodder after the corn has been husked from the stalks by hand, as in figure 12.

HARVESTING SOY BEANS



FIG. 14.—Soy beans for seed are cut with the self-rake reaper, grain binder, or mower, and in some instances with a bean puller. After cutting there is still considerable work to be done.

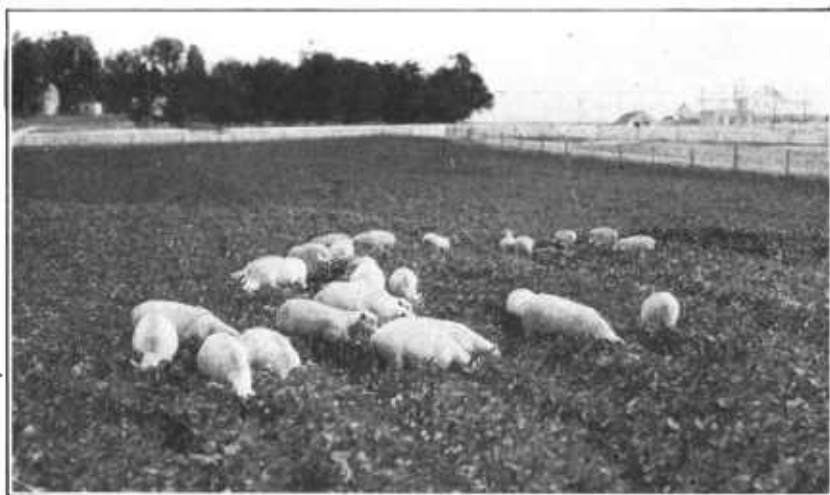


FIG. 15.—Soy beans furnish excellent grazing for lambs, and afford abundant forage free from the parasites common to permanent pastures. This crop also is equally desirable for hogs and may be harvested by these animals both as forage and after the beans have ripened. Live stock thus save the labor of cutting (as shown in figure 14), shocking and hauling.

SOY BEANS—FEEDING VS. THRASHING



FIG. 16.—As a usual thing it is difficult to get a satisfactory outfit for thrashing soy beans. Here a special machine is being used, but the ordinary separator is generally the only machine available. Special attachments are necessary and few thrashermen care to go to the trouble to accommodate farmers with small acreages of beans. Large growers generally own their own equipment.



FIG. 17.—The labor and annoyance of thrashing soy beans, as in figure 16, may be saved by feeding the soy-bean hay to hogs in the winter. The beans supply the protein and save the purchase of tankage. The oil in the beans and the leaves of the plants which the hogs eat keep them in good condition. Soy-bean hay and corn make an ideal winter feed.

MARKETING ROUGHAGE



FIG. 18.—In the marketing of hay and roughage there is a large bulk to handle and haul to the point of delivery. Here there is much extra labor for the men and teams on grain and crop farms, and much fertility is taken off which might otherwise be returned to the fields.



FIG. 19.—One of the chief advantages in keeping cattle is that they assimilate large quantities of roughage and waste feeds and carry it to market themselves in a more concentrated form. The farmer is thus saved the labor of marketing bulky feed products, as in figure 18, and the fertility remains on the farm.

MARKETING GRAIN



FIG. 20.—This team and wagon are transporting to market 50 to 60 bushels of corn per load. The same team and wagon with a good rack will haul to market from 225 to 250 bushels of corn in the form of finished hogs like those shown in figure 21.



FIG. 21.—When only a short distance from market, live stock may be driven without any appreciable loss in weight. In this instance, in addition to a large amount of forage and pasture, these animals are carrying to market about the equivalent of one wagon load of corn, such as is shown in figure 20, to every four hogs.

WINTER EMPLOYMENT



FIG. 22.—In many localities, especially in the North, feeding and caring for live stock furnishes about the only profitable winter labor that can be done on the ordinary farm.

THE FARMERS OF THIS COUNTRY are as efficient as any other farmers in the world. They do not produce more per acre than the farmers in Europe. It is not necessary that they should do so. It would perhaps be bad economy for them to attempt it. But they do produce by two to three or four times more per man, per unit of labor and capital, than the farmers of any European country. They are more alert and use more labor-saving devices than any other farmers in the world. And their response to the demands of the present emergency has been in every way remarkable. Last spring their planting exceeded by 12,000,000 acres the largest planting of any previous year, and the yields from the crops were record-breaking yields. In the fall of 1917 a wheat acreage of 42,170,000 was planted, which was 1,000,000 larger than for any preceding year, 3,000,000 greater than the next largest, and 7,000,000 greater than the preceding five-year average.

But I ought to say to you that it is not only necessary that these achievements should be repeated, but that they should be exceeded. I know what this advice involves. It involves not only labor, but sacrifice; the painstaking application of every bit of scientific knowledge and every tested practice that is available. It means the utmost economy, even to the point where the pinch comes. It means the kind of concentration and self-sacrifice which is involved in the field of battle itself, where the object always looms greater than the individual. And yet the Government will help, and help in every way that is possible.—From President Wilson's Message to the Farmers' Conference at Urbana, Ill., January 31, 1918.